

JAN 16 2006

In view of the above-described circumstances, an object of the present invention is to provide a fuel tank supporting structure which can reduce the load which is applied to fuel tanks at the time of a collision.

In order to achieve the above-described object, in accordance with one aspect of the present invention, there is provided a fuel tank supporting structure in which a plurality of fuel tanks are disposed in parallel, comprising fuel tank guiding means for, in a case in which a load of a predetermined value or more is applied to the fuel tanks, guiding movement of at least one fuel tank that is adjacent to a vehicle body outermost fuel tank downward in a vertical direction of a vehicle body.

Preferably, the fuel tank guiding means includes movement preventing means for preventing upward movement of the fuel tank, and a weak portion formed at a fuel tank supporting bracket which is disposed beneath the fuel tank, and the weak portion breaks in a case in which a load of a predetermined value or more is applied. Preferably, the weak portion is cut-out formed portions of the fuel tank supporting bracket. Preferably, the fuel tank supporting bracket includes a first bracket, a second bracket, and a connecting portion connecting the both brackets, and the weak portion is the connecting portion. Preferably, the weak portion is a thin-walled portion of the fuel tank supporting bracket. Preferably, the fuel tank guiding means includes movement preventing means for preventing upward movement of the fuel tank, and inclined portions formed at opposing surfaces of adjacent fuel tanks. Preferably, the fuel tank supporting structure is set such that fuel can be successively used from a vehicle body outer side fuel tank. Preferably, the fuel tank supporting structure comprises vehicle body left and right rockers, wherein, between the rockers, the fuel tanks are disposed so as to respectively extend in a vehicle transverse direction. Preferably, the fuel tank supporting structure comprises falling-out preventing means for preventing the fuel tank from completely falling-out toward a bottom of the vehicle body. Preferably, the falling-out preventing means includes a sub frame disposed so

CLAIMS

1. (Cancelled)

2. (Amended) A fuel tank supporting structure in which a plurality of fuel tanks (52, 54, 56) are disposed in parallel, comprising fuel tank guiding means for, in a case in which a load of a predetermined value or more is applied to the fuel tanks (52, 54, 56), guiding movement of at least one fuel tank (54) that is adjacent to a vehicle body outermost fuel tank (56) downward in a vertical direction of a vehicle body,

wherein the fuel tank guiding means includes movement preventing means (20) for preventing upward movement of the fuel tank (56), and a weak portion formed at a fuel tank supporting bracket (62) which is disposed beneath the fuel tank (54), and

the weak portion breaks in a case in which a load of a predetermined value or more is applied.

3. The fuel tank supporting structure of claim 2, wherein the weak portion is cut-out formed portions (72, 74) of the fuel tank supporting bracket (62).

4. The fuel tank supporting structure of claim 2, wherein the fuel tank supporting bracket (62) includes a first bracket (76), a second bracket (78), and a connecting portion (84) connecting the both brackets (76, 78), and

the weak portion is the connecting portion (84).

5. The fuel tank supporting structure of claim 2, wherein the weak portion is a thin-walled portion of the fuel tank supporting bracket (62).

6. (Amended) The fuel tank supporting structure of claim 2, wherein the fuel tank guiding means includes movement preventing means (20) for preventing upward movement of the fuel tank (56), and inclined portions (86, 88) formed at opposing surfaces of adjacent fuel tanks.

7. (Amended) The fuel tank supporting structure of claim 2, wherein the fuel tank supporting structure is set such that fuel can be successively used from a vehicle body outer side fuel tank (56).

8. (Amended) The fuel tank supporting structure of claim 2, comprising vehicle body left and right rockers (14, 14), wherein, between the rockers (14, 14), the fuel tanks (52, 54, 56) are disposed so as to respectively extend in a vehicle transverse direction.

9. (Amended) The fuel tank supporting structure of claim 2, comprising falling-out preventing means for preventing the fuel tank (54) from completely falling-out toward a bottom of the vehicle body.

10. The fuel tank supporting structure of claim 9, wherein the falling-out preventing means includes a sub frame (40) disposed so as to be separated from the fuel tank (54) toward a lower side of the fuel tank (54), and when the fuel tank (54) moves downward, the sub frame (40) catches on the fuel tank (54) and can prevent the fuel tank (54) from falling-out.

11. The fuel tank supporting structure of claim 10, wherein the sub frame (40) includes at least two cross rails (46, 48) which are disposed at the lower side of the fuel tank (54) so as

to respectively extend in a vehicle transverse direction, and

a vehicle longitudinal direction dimension between the cross rails (46, 48) is smaller than a diameter of the fuel tank (54).

12. (New) The fuel tank supporting structure of claim 2, wherein the vehicle body outermost fuel tank (56) is disposed upwardly offset from at least the fuel tank (54) adjacent thereto.